



California State University of Bakersfield, Department of Chemistry

Make an Egg Float in Salt Water



Standards:

8th grade: 8a. Density is mass per volume, 8c. The buoyant force on an object in a fluid is an upward force equal to the weight of the fluid the object has displaced.

Introduction:

In this experiment you will make an egg float in salt water. Have you ever noticed that it is easier to float in the ocean than in a river or a pool? This is because of the salt in the water. Just like you in the ocean, the egg will float in a glass of salt water. When salt is added to water the water becomes dense, density is the amount of matter contained in a given space. With this said, when the water becomes denser (heavier) than the egg, the egg will float.

Materials:

- One Egg
- Water
- Salt
- A tall drinking glass or beaker
- Always have an adult with you to help you during your experiment.

Procedure:

1. Pour water into your tall glass or beaker until it is about half full.
2. Stir in about 6 tablespoons of salt.
3. Carefully pour in plain water until the glass is nearly full (be careful to not disturb or mix the salty water with the plain water).
4. Gently lower the egg into the water.
5. Watch as the egg floats!

Data and Observations:

Record your observations in this space

What did you see? Anything you were not expecting? Describe it here.

Questions:

Why did the egg float?

What does density have to do with this experiment?

What do you think would happen if you only put salt water in the glass?

References:

1. Sciencekids.com.<http://www.sciencekids.co.nz/experiments/floatingeggs.html>
(accessed July 16, 2012).